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## REMARKS

### Status of claims

Claims 1-9 have been rejected under 35 USC 103(a) for obviousness over Admission in view of Winters.

### Preliminary Comments

The rejections against the independent claims 1, 6, 7 and 8 claims are unclear and insufficiently reasoned to enable the applicant to properly evaluate his position. For example, on page 3 of the office action, the Examiner indicates that:

“Admission does not teach the instantaneous channel-capacity values has is to a predetermined probability below given level.

However, Winters not teach the instantaneous channel capacity values has is to a predetermined probability below given level (see column 9, lines 25-41 and figures 4-5”).

If the Examiner chooses to seek to maintain this rejection, so as to enable the Applicants to properly evaluate their position, the Examiner is requested to point out, and explain in greater detail, the relevance of the particularly cited portions of Winters.

### Comments in Response to Arguments

The argument below has been amended to address the Examiner's response comments. In particular, the disclosure of Winters has been discussed in greater detail. Secondly, it has been emphasized that the Applicants argument is not merely to the reference individually but that there is no motivation to combine Admission and Winters. Thirdly the allegation of lack of compliance with 37 CFR 1.111(b) has been addressed by indicating explicitly how the claim language patentably distinguishes over the references.

### Claim 1

Admission does not teach, to use the wording of claim 1, “processing the values to determine a level of channel capacity such that any of the instantaneous channel capacity values is to a predetermined probability below that level,” where the values are “of

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instantaneous channel capacity of a MIMO channel of a mobile user terminal at multiple time instants over a predetermined time”.

This is apparently accepted by the Examiner as he states in the Office Action mailed September 5, 2007 that “Admission does not teach the predetermined probability below given level”, and the Examiner then looks to Winters to provide this feature.

The skilled reader of Admission has no motivation to look to the teaching of Winters. It will be recalled, as confirmed in *KSR International Co. v. Teleflex Inc. et al.* that the skilled man must have a real reason to seek to combine the teachings.

Admission relates to evaluating performance of a MIMO network in terms of frame error rates based on instantaneous channel capacities.

Conversely, Winters relates to a different technical matter, namely a method for receive-processing with multiple antennas that is based on antenna selection. To select the optimal sub-group of antennas of the receiver, a correlation metric and a capacity metric (more specifically a mutual information metric) are used. As shown in Figures 3 and 4, Winters uses a statistical probability of instantaneous channel capacity to evaluate various proposed methods of antenna selection, see column 9 lines 17 to 19: “Referring now to Figs. 3 and 4, the outage probability of each disclosed method in a MIMO OFDM system.....is shown”. See also column 9 lines 41 to 48 where the performances of the various methods of antenna selection are compared. Winters is not concerned with at least, as required by claim 1, “looking up said level in predetermined calibration data of FER versus the channel capacity level so as to provide an FER value”, where said level is a level of channel capacity.

Another difference is that Winters relates to a receiver for a single communications link. Conversely, Admission is a method of performance evaluation in a MIMO network comprising multiple links.

Due to the above-mentioned differences, there is no motivation for the skilled reader of Admission to look to Winters, and even if the skilled refer of Admission were to look to Winters, in particular e.g. its column 9 lines 25 to 41 (or lines 17 to 48) and Figures 4-5 (or Figures 3-5), the skilled reader would dismiss Winters as incompatible with Admission. Those portions of Winters relates to selection of antenna sub-groups. Admission relates to MIMO network performance evaluation.

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The present invention is based on the inventive insight over Admission that the influence of fading due to Doppler effects in consequence of mobility can be taken into account when considering channel capacities. The solution is to process instantaneous channel capacity values to provide a level below which there is a predetermined probability of the actual channel capacity being less than.

There is nothing in Admission to teach or suggest the above-mentioned insight and nothing to lead the skilled reader of Admission towards Winters in search of the solution.

It follows that claim 1 is patentable to the standard of 35 USC 103 over the cited art.

#### Claims 2 to 5

Dependent claims 2 to 5 are patentable not least on the basis that they each depend on an allowable independent claim 1.

#### Claims 6, 7, 8

Each of independent claims 6, 7, and 8 has been amended in line with claim 1, and is patentable on the same basis as presented above in respect of claim 1.

#### Dependent claim 9

Dependent claim 9 is patentable not least on the basis that it depends on an allowable independent claim 8.

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Conclusion

In view of the foregoing, allowance of all the claims presently in the application is respectfully requested, as is passage to issuance of the application. If the Examiner should feel that the application is not yet in a condition for allowance and that a telephone interview would be useful, he is invited to contact Applicant's undersigned attorney at 630 979 4637

Respectfully submitted,



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12/5/07

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